ABSTRACT OF THE DISCLOSURE

A method and apparatus for inspecting a bump electrode is almost independent of a surface condition of an object to be inspected. Before starting inspection, a template image is prepared by using a predetermined function. During inspection, a gradation correction of the photographed image is made by using a function with a saturation characteristic. The photographed image, which includes an image corresponding to at least one ball, is then segmented. Whether each bump electrode is an acceptable product or not is determined by pattern matching by calculating a normalized correlation coefficient between the segmented image and the template image prepared in advance.